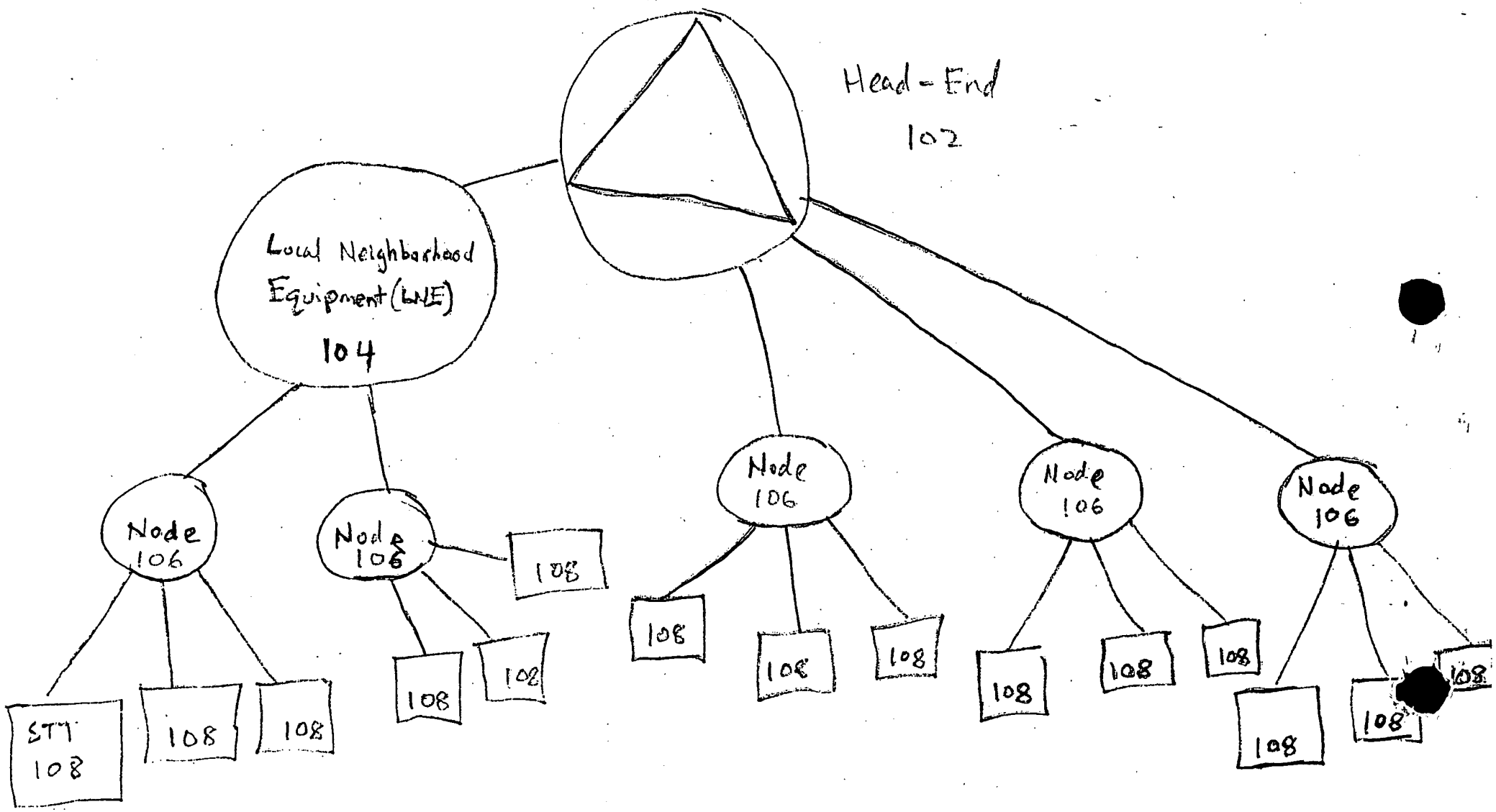
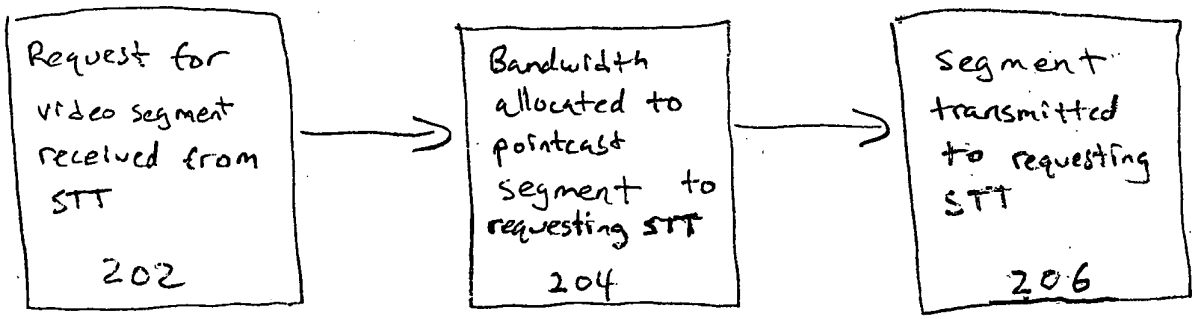

Head-End
102
Local Neighborhood
Equipment (LNE)
104
Node
106
Node
106
Node
106
Node
106
Node
106
STT
108
108
108
108
108
108
108
108
108
108
108
108
108
108
108

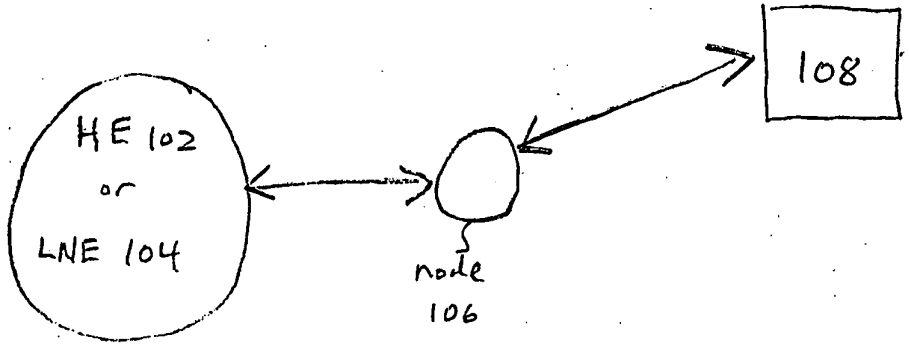
Fig. 1 100



First Pull Demandcast (pointcast) method

200

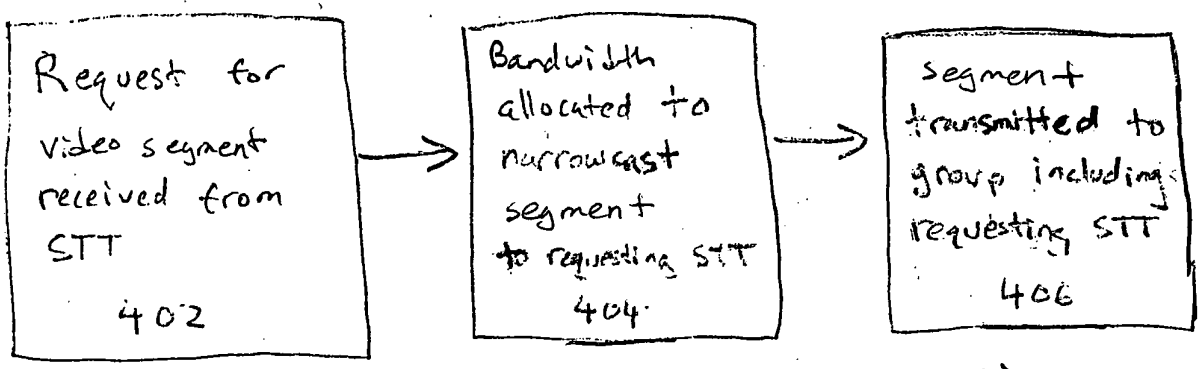
Fig. 2



First PuN Demandcast (Pointcast) Topology

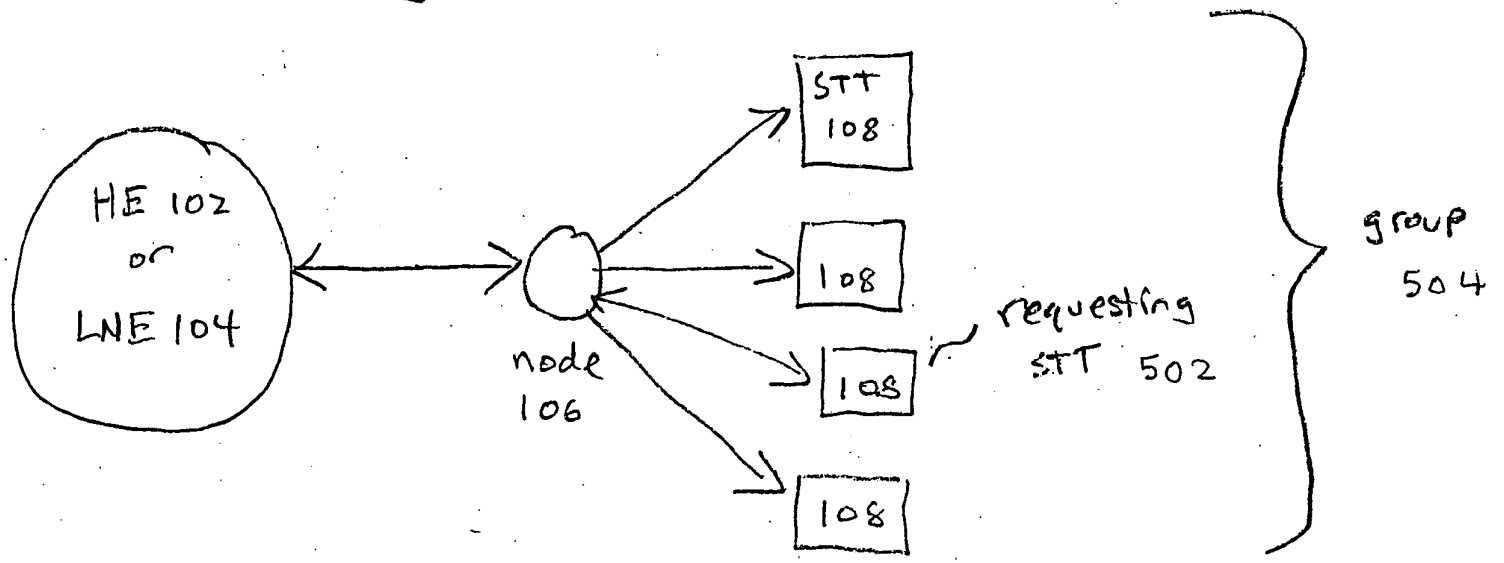
300

Fig. 3



Second Pull Demandcast (Narrowcast) method 400

Fig. 4



Second Pull Demandcast (Narrowcast) Topology 500

Fig. 5

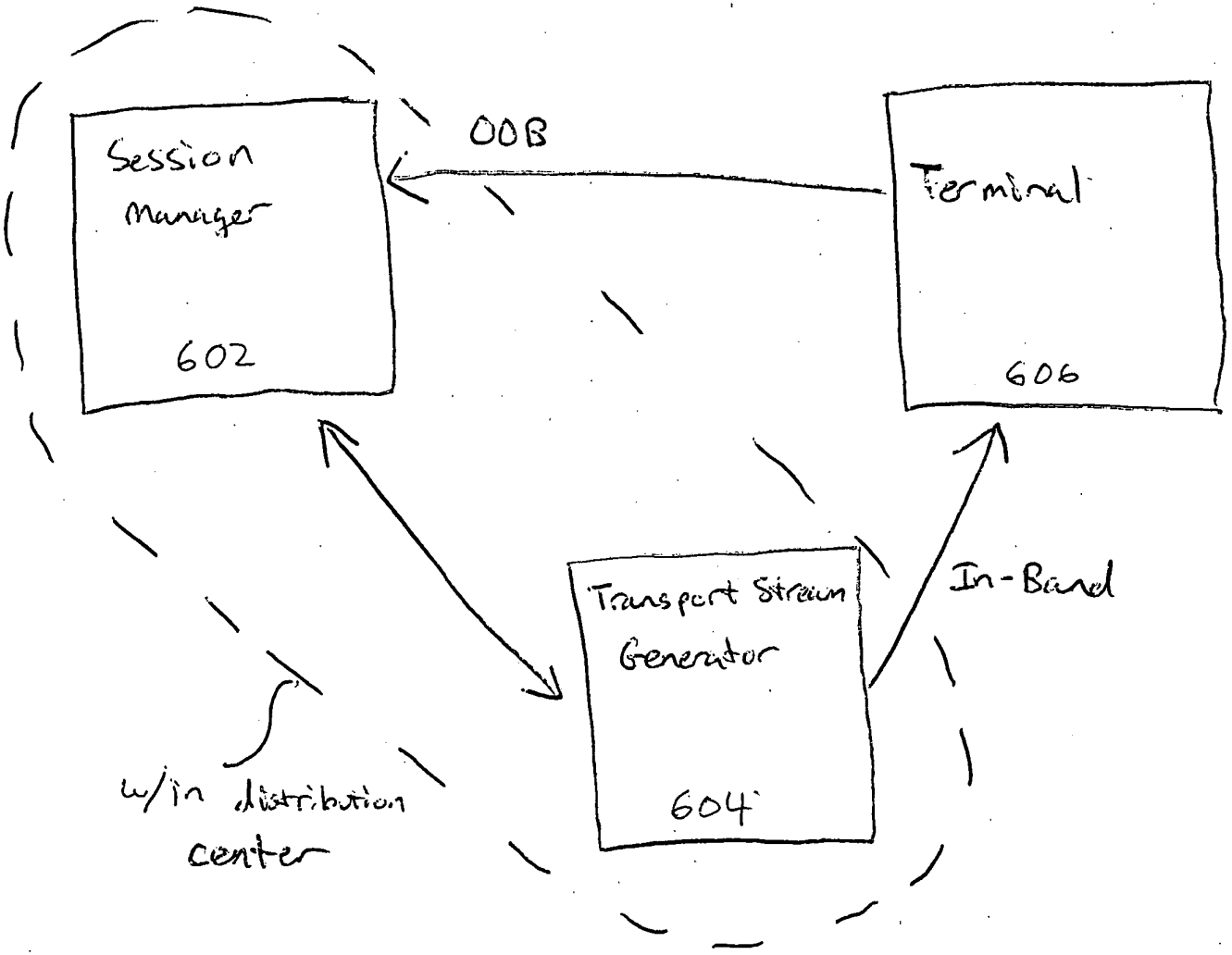

Session Manager
602
OOB
Terminal
606
Transport Stream Generator
604
In-Band
w/in distribution center
600

Fig. 6

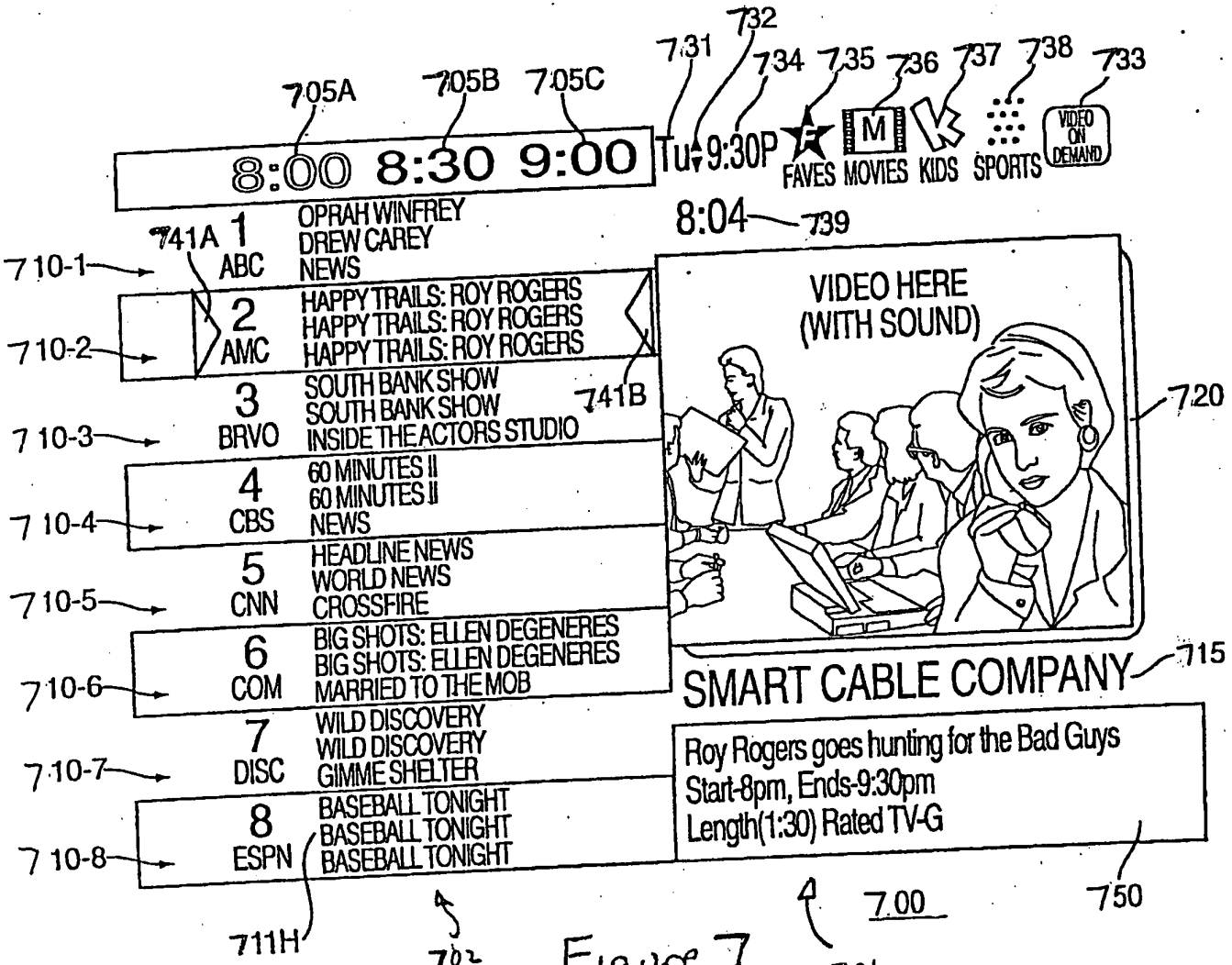

705A
705B
705C
731
732
734
735
736
737
738
733
8:00 8:30 9:00
Tu 9:30P
FAVES
MOVIES
KIDS
SPORTS
VIDEO ON DEMAND
8:04
739
741A
710-1
1 ABC OPRAH WINFREY DREW CAREY NEWS
710-2
2 AMC HAPPY TRAILS: ROY ROGERS HAPPY TRAILS: ROY ROGERS HAPPY TRAILS: ROY ROGERS
741B
710-3
3 BRVO SOUTH BANK SHOW SOUTH BANK SHOW INSIDE THE ACTORS STUDIO
710-4
4 CBS 60 MINUTES II 60 MINUTES II NEWS
710-5
5 CNN HEADLINE NEWS WORLD NEWS CROSSFIRE
710-6
6 COM BIG SHOTS: ELLEN DEGENERES BIG SHOTS: ELLEN DEGENERES MARRIED TO THE MOB
710-7
7 DISC WILD DISCOVERY WILD DISCOVERY GIMME SHELTER
710-8
8 ESPN BASEBALL TONIGHT BASEBALL TONIGHT BASEBALL TONIGHT
711H
VIDEO HERE (WITH SOUND)
720
SMART CABLE COMPANY
715
Roy Rogers goes hunting for the Bad Guys
Start-8pm, Ends-9:30pm
Length(1:30) Rated TV-G
750
7:00
702
701

Figure 7

TSG-to-Terminal Communication:

Contents of Demand-Cast Index Table

table version number (incremented when table content changes)
list of available demand-cast streams
IP address for the source TSG
MUX channel number within the source TSG
time of day and day of week

Fig. 8

Terminal-to-SM Communication:

Message Content

demand-cast stream ID
terminal ID
IP address for the source TSG
MUX channel number within the source TSG
message information (acquisition, release, or request)

Fig. 9

SM to-TSG Communication:

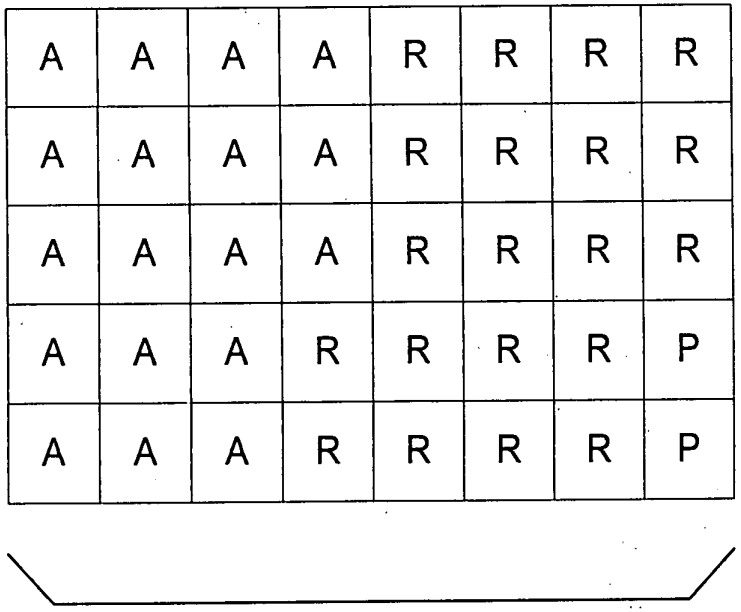
Message Content
demand-cast stream ID
MUX channel number within the source TSG
message/command (stream released, stream requested, or reset)

Fig. 10

TSG-to-SM Communication:

Message Content
demand-cast stream ID
MUX channel number within the source TSG
IP address for the source TSG
acknowledgment (of stream release, of stream request, or of reset)

Fig. 11



A: acquired streams are in mux and in demand-cast index table

R: released streams are in mux and in demand-cast index table. They can be turned into passive streams.

P: passive streams are technically released. They are not in the demand-cast index table. They are removable.

TSG Demand-cast Stream Status

Fig. 12

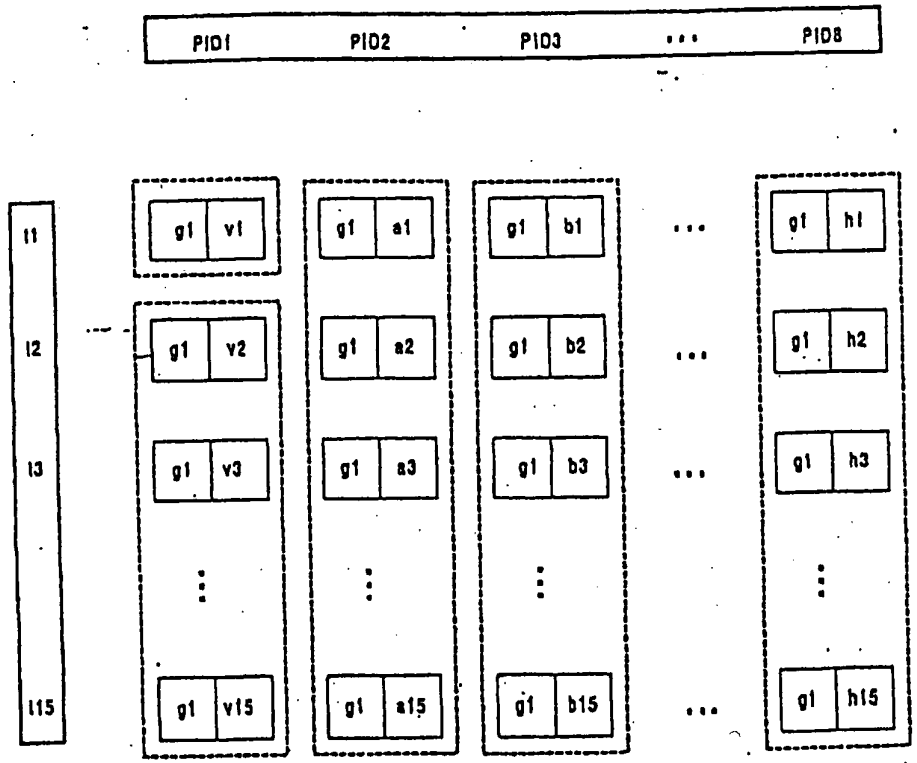

PID1
PID2
PID3
...
PIDB
1300
I1
I2
I3
I15
g1 v1
g1 a1
g1 b1
g1 h1
g1 v2
g1 a2
g1 b2
g1 h2
g1 v3
g1 a3
g1 b3
g1 h3
g1 v15
g1 a15
g1 b15
g1 h15

FIG. 13